



MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE THREE AND SIX MONTHS ENDED JUNE 30, 2022

This Management's Discussion and Analysis ("MD&A") should be read in conjunction with CVW CleanTech Inc.'s (formerly Titanium Corporation Inc.) ("CVW CleanTech" or the "Company") audited financial statements and notes thereto for the year ended December 31, 2021, along with the condensed interim financial statements for the three and six months ended June 30, 2022.

This MD&A has been prepared as of August 25, 2022. CVW CleanTech Inc. is a development stage company whose common shares are listed on the TSX Venture Exchange under the symbol "CVW". This MD&A and the audited financial statements and comparative information have been prepared and approved by the Board of Directors (the "Board of Directors") of the Company in accordance with International Financial Reporting Standards ("IFRS"). All financial measures presented in this MD&A are expressed in Canadian dollars, unless otherwise indicated.

Additional information and the above referenced material is available on CVW CleanTech Inc.'s website at www.CVWCleanTech.com or on SEDAR at www.sedar.com

Contents

Nature of Business	1
Quarterly results and operations update	2
Liquidity.....	4
Selected quarterly results	5
Research and Development Expenditures	6
General and Administrative Expenditures.....	8
Market Opportunity	11
Financial Instruments and Financial Risk Factors	13
Related Party Transactions.....	15
Off Balance Sheet Arrangements	16
Additional Disclosure for Venture Issuers Without Significant Revenue	16
Discussion of Risks.....	17
Critical Accounting Estimates and Judgements	28
Outstanding Share Data	29
Forward looking information or statements and cautionary factors that may affect future results.....	30

Nature of Business

CVW CleanTech is a clean technology innovator that has developed a suite of technologies to serve the mining sector of the oil sands industry. Creating Value from Waste™ (“CVW™”) technologies allow oil sands operators to reduce their emissions and to extract valuable products from oil sands waste.

The Company expects recovery of valuable products from waste streams will result in important and timely environmental and economic benefits for the oil sands industry. Recovering additional bitumen from the existing froth tailings stream provides incremental revenue, helping achieve better netbacks. Critical minerals are recovered for sale, providing new cash inflows for operators. These minerals have been highlighted by the Alberta and Canadian government as crucial to the development of Canada’s low carbon economy.

Environmental benefits include reduced GHG (greenhouse gases or “GHGs” or “CO₂e”) emissions. When residual amounts of hydrocarbons begin to biodegrade in a tailings pond, GHG’s are released. Methane is the primary GHG emitted, which is known to have a global warming potential 25 times as potent as carbon dioxide, considering its impact over 100 years. By recovering bitumen and solvents that otherwise would be lost in tailings waste, methane emissions from tailings ponds can be significantly reduced.

Remediation of oil sands tailings is an industry and government priority. Our clean technology fills a gap in tailings management and delivers environmental benefits by producing a cleaner and lower volume of tailings for deposition, reduces methane emissions and other critical air contaminants. Canada’s oil and gas industry has a multifaceted plan to address these issues and CVW™ technologies will help deliver that plan.

Future development opportunities include examining how the Company’s technologies and its related financial structuring could be applied in the clean technology industry, more broadly. Diversifying in this fashion, while retaining a clean technology core, could permit a scaling of the business across multiple industries and geographies.

Quarterly results and operations update

During the second quarter of 2022, the Company maintained its focus on engineering refinements and revisions in our detailed economic models to support the commercial scale deployment of CVW™ technologies. Our team has revised financial and economic models to integrate increased forecast prices for oil and critical minerals, while considering the impact of recent Federal government announcements related to carbon pricing¹.

Management and the Board of Directors continue to seek opportunities to enhance value for our future partners. Consideration is being given to developing a capital structure that will permit royalty payments to CVW CleanTech, while flowing through a return of capital to the oil sands operator. This alternative method of financing would provide compelling rates of return to all stakeholders in our future projects.

In prior years, we have collected data from many oil sands mining sites. This data has been used to create base case scenarios to illustrate the possible economic benefits of a 'generic' commercial project (Concentrator Plant and Mineral Separation Plant). These scenarios are meant to provide illustration of the potential magnitude and scale our CVW™ technologies offer.

Our industry partner Canadian Natural Resources Limited, ("Canadian Natural"), is a leading member of the Pathways Alliance (previously, the "Oil Sands Pathways to Zero Initiative"), which seeks to achieve net zero GHG emissions by 2050 amongst oil sands operators. CVW CleanTech's engineering and technical team has continued its dialogue with Canadian Natural's joint project team, seeking ways to identify operational improvements in design that could ease integration at Canadian Natural's Horizon Oil Sands mining site (the "Project"). Further technical studies are being undertaken in certain of these areas to identify and quantify the additional potential benefits, economic and environmental, for the Project. This work could potentially result in modifications to the Project with associated engineering changes. While we are encouraged by these discussions, no agreement has been reached and there is no certainty that the Company and Canadian Natural will reach an agreement.

The advancement of our technologies and work completed to date with Canadian Natural at the Horizon Oil Sands Mining Site have been strongly supported by government grants. Funding has been received in the past two years from Natural Resources Canada's Clean Growth Program ("NRCan"), Emissions Reduction Alberta ("ERA") and Sustainable Development Technology Canada ("SDTC").

As noted in our Q3 2021 MD&A, funding from the Low Carbon Economy Fund required final contracts to be negotiated, including an extension of the prescribed milestones and Project completion dates. We were informed in July 2022 that the timeframes could not be extended, and as a result, LCEF rescinded their in principle agreement to provide funding. We expect that it will be possible to launch a new application with this organization for funding with a separate agreement in the future.

The January 2021 agreement with NRCan was concluded in December 2021; over the term of the agreement, we earned approximately \$2 million towards the Project. The government of Canada, in its 2022 Budget, pledged over \$8 billion for the Net Zero Accelerator program, and \$15 billion to help build Canada's net zero economy through the Canada Growth Fundⁱⁱ. These types of investments demonstrate the Canadian government's long-term commitment to transitioning to a low carbon economy. We are confident that these government programs will continue to provide CVW CleanTech access to low cost and non repayable sources of capital. In addition, awarded funding remains in place with Clean Resources Innovation Network, SDTC and ERA.

During January 2022, 4.5 million stock options were granted to directors and executive officers of the Company. These options had market price based vesting conditions, which required the shares to trade at or above \$1.25 for 90 consecutive trading days. This condition was met in mid June 2022, and as a result, these options have become fully vested, and are eligible for exercise.

The Company's Executive Chairman, Mr. Darren Morcombe, has served as the Company's interim Chief Executive Officer since April 1, 2022. He is expected to continue in this role until the Board of Directors appoints a permanent Chief Executive Officer. The Board has begun the process of identifying and considering candidates to fulfill the CEO role.

When the Board of Directors was reconstituted in January 2022, the group noted that there may be wider application for the Company's technologies and related financing structuring. The team have been actively considering how these elements can be utilized to diversify the Company's partnership opportunities in the clean technology industry. The Board anticipates this will form a key component of the business development strategy under the leadership of a new CEO.

In July 2022, the government of Canada launched a formal process to solicit feedback on two possible regulatory options to reduce GHG emissions in the domestic oil and gas sector. The outcome of this process is expected to result in modifications to carbon pricing forecasts, and / or reductions in the total permitted quantity of emissions (a "cap") from upstream oil and gas operations. The government has indicated the outcome of this process will be announced early in 2023. CVW CleanTech plans to prepare a submission, highlighting the important role technology and innovation must play, why its crucial to support the oil sands industry, and how CVWTM technologies can help contribute to reducing oil and gas emissions in Canada.

Liquidity

Over the past six months, cash from financing activities, including the January 2022 private placement, have raised \$6.8 million, net of \$423,000 in related financing fees. During Q2 2022, 650,000 stock options and warrants were converted to common shares, resulting in cash proceeds to the Company of \$1.4 million. Cash balances were also enhanced as a result of lower operating expenses. The operating loss for the quarters ended June 30, 2021 and 2022 before considering stock-based compensation, has declined from \$688,000 to \$493,000. This represents a decrease of approximately 28% compared to Q2 2021, and is approximately 21% lower than the first six months of 2021. Cash in excess of day-to-day operating needs will continue to be preserved, held until detailed engineering and further project work commences. The cash balance at June 30, 2022 of \$4.9 million provides a stable and well capitalized base to sustain the business going forward (December 31, 2021 – cash balance \$408,000).

We remain committed to commencing the execution stage of the Project with our industry partner Canadian Natural, however, we are unable to forecast a start date at this time. When CVW CleanTech has agreements in place to commercially deploy its technologies, additional sources of capital are expected to be required. Sources of capital to fund that stage of development are anticipated to come from a variety of sources, including, but not limited to government grants, debt financing and equity placements.

Selected quarterly results

	Q2 June 30, 2022	Q1 Mar 31, 2022	Q4 Dec 31, 2021	Q3 Sep 30, 2021
Net Loss	\$1,828,000	\$836,000	\$554,000	\$87,000
Basic and Diluted Loss per Share	0.02	0.01	0.01	0.01

	Q2 June 30, 2021	Q1 Mar 31, 2021	Q4 Dec 31, 2020	Q3 Sep 30, 2020
Net Loss	\$718,000	\$912,000	\$967,000	\$776,000
Basic and Diluted loss per share	0.01	0.01	0.01	0.01

For the three month period ended June 30, 2022, the Company reported net losses of \$1,828,000 or \$0.02 per share. The loss consisted primarily of G&A expenses of \$1.5 million and R&D expenditures of \$292,000, before considering interest income of \$11,000. This compares to a net loss of \$718,000 for the three-month period ended June 30, 2021, which consisted of G&A expenses of \$668,000 and net R&D expenses of \$52,000, before considering interest income of \$2,000.

The increase in G&A expenditures of \$1.1 million occurred due to the vesting of 4.5 million stock options. Stock based compensation expense for the quarter was \$1.2 million, compared to \$18,000 for the same quarter of 2021. Costs associated with consulting and professional fees, compensation and benefits and regulatory expenses all declined quarter over quarter.

The increase in net R&D expenses of \$240,000, was due to receipt of government funding in Q2 2021. During Q2 2022, no cash receipts from government grants occurred, whereas \$248,000 was received in 2021. In addition, there were minimal ongoing Project expenditures between April and June 2022, with no R&D test work or engineering undertaken, aside from forth treatment tailings evaluations.

The Company had an aggregate of \$4.9 million in cash at June 30, 2022, as compared to \$408,000 at December 31, 2021. The increased cash balance arose upon completion of a \$ 5 million private placement in January 2022, along with \$2.3 million received to June 30, 2022 upon the conversion of stock options and warrants.

Research and Development Expenditures

Three months ended June 30, 2022 and 2021

Quarter ended	June 30, 2022	June 30, 2021	Increase (decrease)
Compensation and benefits	148,000	184,000	(36,000)
Projects, rent and other	22,000	91,000	(69,000)
Stock based compensation	121,000	12,000	109,000
Deferred compensation	-	13,000	(13,000)
Government grants	-	(248,000)	(248,000)
Research and development, net of recoveries	\$291,000	\$52,000	\$239,000

Six months ended June 30, 2022 and 2021

Half year ended:	June 30, 2022	June 30, 2021	Increase (decrease)
Compensation and benefits	293,000	349,000	(56,000)
Projects, rent and other	59,000	1,587,000	(1,528,000)
Stock based compensation	135,000	28,000	107,000
Deferred compensation	-	25,000	(25,000)
Government grants	-	(1,397,000)	(1,397,000)
Research and development, net of recoveries	\$ 487,000	\$ 592,000	\$ (105,000)

- During the early part of 2021, engineering activities related to the redesign of the Mineral Separation Plant and the transload facilities, along with optimization and costing activities for the Concentrator Plant, were underway. In addition, Class 3 engineering capital cost and operating expense estimates were updated. In comparison, Project related expenses in 2022 have consisted primarily of froth treatment tailings sampling, along with mineral evaluations. The timing of these activities resulted in a reduction in Project related expenses of \$1,528,000 and a decrease in associated government funding of \$1,397,000.

Comparing Q2 2022 to Q2 2021, these expenditures were \$69,000 lower. In the current period, project costs consisted primarily of compositing froth treatment tailings production samples to determine average monthly mineral content. The 2021 period included ongoing engineering fees, equipment storage, sample storage and sampling analysis totalling \$88,000 whereas the amount in 2022 was \$9,000.

The decreases were offset by primarily by increases in legal fees incurred for patent maintenance and conference attendance and related travel. Government grants and project cost recoveries in the three-month period ended June 30, 2021 included funding receipts from SDTC and ERA, net of grant amounts shared with Canadian Natural for Project expenses. These receipts related to ongoing engineering, design, validation and optimization activities. In the current quarter, there were no similar amounts claimed or recorded.

- For the first six months of 2022, compensation for our technical team was approximately 16% lower than in the prior year. The reduction of \$56,000 was related to a \$45,000 bonus recorded in 2021, along with additional vacation accruals for that period. During Q2 2021, compensation and benefits included accruals for cash bonuses and vacation amounts, which were unnecessary in the current year. This resulted in a decrease of \$41,000, which was offset by increases in group benefits of approximately \$5,000 in the period ended June 30, 2022. There were no grants of variable pay that gave rise to deferred compensation in the six months ended June 30, 2022. As a result, there was a reduction of \$25,000 compared to the same period of the prior year.
- Stock based compensation expense consisted of amounts for 400,000 options granted in January 2022 that became fully vested by June 2022. For previous grants of stock options, the related expenses were recognized over a three year period, mirroring the vesting period. This 'compressed' the full expense into a shorter time frame than would have been customary in the past. The 2021 amount was recorded to reflect the vesting of options over a three year period.

General and Administrative Expenditures

Three months ended June 30, 2022 and 2021

Quarter ended:	June 30, 2022	June 30, 2021	Increase (decrease)
Compensation and benefits	61,000	205,000	(144,000)
Consulting and professional fees	128,000	209,000	(81,000)
Deferred compensation – directors	-	103,000	(103,000)
Deferred compensation - management	-	12,000	(12,000)
Directors' fees	69,000	-	69,000
Investor relations and regulatory	43,000	81,000	(38,000)
Rent, insurance and office	32,000	40,000	(8,000)
Stock based compensation – directors	1,182,000	10,000	1,172,000
Stock based compensation - management	32,000	8,000	24,000
	\$ 1,547,000	\$ 668,000	\$ 879,000

Six months ended June 30, 2022 and 2021

Half year ended:	June 30, 2022	June 30, 2021	Increase (decrease)
Compensation and benefits	396,000	356,000	40,000
Consulting and professional fees	166,000	269,000	(103,000)
Deferred compensation – directors	-	177,000	(177,000)
Deferred compensation - management	-	25,000	(25,000)
Directors' fees	140,000	-	140,000
Investor relations and regulatory	93,000	92,000	1,000
Rent, insurance and office	69,000	73,000	(4,000)
Stock based compensation – directors	1,286,000	21,000	1,265,000
Stock based compensation - management	38,000	27,000	9,000
Other	2,000	1,000	1,000
	\$ 2,190,000	\$ 1,041,000	\$ 1,149,000

- Total general and administrative expenditures were \$879,000 higher than the second quarter of 2021. The increase was principally due to the vesting of 4,100,000 stock options during the period. The increase was offset by reductions in consulting and professional fees, compensation and benefits and deferred compensation.

- Compensation and benefits decreased in Q2 2022 vs. Q1 2021 by \$144,000. No salary expenses for this role were incurred in the current quarter due to the retirement of the Company's CEO on March 31, 2022. For the six months ended June 30, 2022, the total compensation and benefits amount increased by \$40,000 year over year. A retirement allowance paid to the former CEO in Q1 2022 increased these expenditures by \$200,000. Reductions were experienced in all other compensation and benefit categories for the year to June 30, 2022, including statutory benefits, RRSP contributions and bonus amounts, offsetting the \$200,000 increase. Deferred compensation and variable pay was \$12,000 less in Q2 2022 and \$25,000 less for the six months ended June 30, 2022 compared to the corresponding periods of 2021. There were no amounts allocated to bonus or variable pay in the current year.
- Consulting and professional fees were \$81,000 lower than Q1 2021 and \$103,000 lower than the 2021 year to date amount, Legal fees declined during the quarter approximately \$69,000, and decreased approximately \$84,000 for the year to date. The balance of the decrease relates primarily to one time recruitment charges incurred in 2021.
- Compensation for the Board of Directors in 2022 has been comprised of an annual retainer of \$30,000, payable quarterly, plus reimbursement for out of pocket travel expenses and a per diem for hours spent directly on Company business. The amount of \$140,000 for the year to date, and \$69,000 for the current quarter should be compared to the deferred compensation amounts for directors in 2021. The Board of Directors in 2021 were compensated in a different fashion, earning fees for each meeting attended. In addition, an annual amount was provided to a director that acted as chairperson of the Board or one of its committees. The amounts were recorded as a deferred compensation expense as it was anticipated the amounts would eventually be settled by issuing DSU's, when sufficient room in the equity plans arose. Comparing the amounts of deferred compensation for directors in 2021 to the directors' fees recorded for 2022, the total decreased by \$34,000 for the quarter and by \$37,000 for the year to date.
- Investor relations and regulatory expenditures were higher in 2021 as a result of commencing and then cancelling the AGM process. As a result, costs were \$38,000 higher in the 2021 period. For the first six months of 2022, these expenses were largely the same in total. However, the amounts incurred for transfer agent expenses and TSX fees were \$21,000 higher than in 2021, while reductions were experienced in the AGM costs as noted above. The increases were due to the volume of equity transactions undertaken in 2022, whereas there were no similar equity transactions and issuances in 2021.
- Amounts for rent, insurance and office were slightly lower for the quarter and for the year to June 30, 2022 vs. the same period of 2021. Information technology costs, software license and computer related expenses declined \$8,000 quarter over quarter. For the year to date, the reduction of \$4,000 was comprised of approximately \$6,000 less for IT and computer related costs. Increases in insurance expense and bank wire charges offset the reductions.

- Stock based compensation increased by \$1,265,000 for directors and by \$9,000 for management in comparison to the first six months of 2021. As noted elsewhere, stock options issued in January 2022 became fully vested in June 2022, resulting in the full expense being captured in a six month period. In the past, options would have been expensed over a three-year vesting period. The increase in stock based compensation expense for the second quarter of 2022 compared to the second quarter of 2021 increased by \$1,172,000 for the same reason.

Market Opportunity

The Company believes the market, political, social and regulatory forces, favouring the adoption of our technology, are intensifying, as industry and governments respond and position the country for a net zero goal by 2050. Widely accepted science-based studies describe the importance of moving to a carbon neutral society and the challenges of moving fast enough to achieve 2050 targets. As the global economy rebounds from COVID-19, the importance of doing so in an environmentally sustainable way is growing. In addition, oil sands companies have been proactively adopting more sustainable and environmentally friendly approaches, including collaborative efforts, such as their Pathways Alliance, as they seek to demonstrate their commitment to reducing their environmental footprint.

Based on our research, pilot programs and studies, key economic drivers that support the adoption of CVW CleanTech's technology include: the commodity value of recovered bitumen and solvents currently lost to tailings ponds; the value of recovered zircon, ilmenite and titanium products and the potential for the recovery of rare earth minerals; the value of emissions abatement under current and future regulatory regimes; potential energy cost reductions due to potential hot process water reuse; potential cost reductions related to enhanced tailings remediation; and potential cost savings related to asset rock drainage mitigation. In addition, our studies suggest that tailings dewater more effectively in subsequent tailings management operations contributing to meeting Government of Alberta regulations requiring reductions in the volume of tailings. The removal of bitumen and solvents could also enable the direct reuse of hot froth treatment tailings water in other mineable oil sands services, reducing energy costs, river water usage and GHGs related to reheating cold pond water used in the bitumen extraction process.

Tailings management remains one of the more difficult environmental challenges for the oil sands mining sector. The Company believes that its CVW™ technology can assist the industry in meeting certain of the regulatory requirements of the Alberta Energy Regulator's (the "AER") Directive 85. This legislation has been in place since 2017 and requires oil sands operators to minimize fluid tailings accumulation through ongoing treatment and progressive reclamation. Technologies such as CVW™ can help reduce the volume of tailings and assist in reaching the ready to reclaim criteria outlined in Directive 85. In particular, the Company's technology has the potential to address a number of the aspects of the AER's Directive 85 sub-objective 2 by mitigating risks associated with treated froth fluid fine tailings.

The Government of Canada, in its announcements at the end of March 2022, provided guidelines to address climate change for various sectors of the economy, with stringent targets for the oil and gas sector. In particular, the Trudeau government has set targets for the oil and gas industry in Canada to reduce its GHG emissions by 42% of 2019 levels by 2030. The federal government has established a number of mechanisms to support the transition to cleaner energy, including up to \$8 billion for the Strategic Innovation Fund's Net Zero Accelerator. This fund aims to support projects that reduce GHG emissions including through the scale-up of clean technologies which reduce the environmental footprint of current production.

The oil sands industry is taking the lead in transitioning its operations to greener technologies, including strategies to assist in reducing GHG emissions. In particular, the members of the Pathways Alliance believe the most effective way to address climate change is by developing and advancing new technologies and that this unprecedented challenge can and will be solved by Canadian ingenuity, leadership and collaboration. The commitment by the consortium to achieve net zero greenhouse gas emissions aligns directly with the benefits that can be provided by our technology.

Additional government initiatives which may be favorable to the commercialization of our technology include the Canadian Minerals and Metals Plan (“CMMP”), which aims to position Canada as a global supplier for strategic and critical minerals. The Province of Alberta introduced their minerals strategy and action plan and legislation in November 2021. Alberta’s Bill 82 aligns the province’s mineral development policies with the CMMP. These critical minerals and rare earths, which include zircon and titanium, are seen as vital to make the transition to net zero.

There is wide acceptance that innovation and new technologies will be the principal source of solutions for reducing both environmental impacts and operating costs in Canada’s oil sands industry. Through a disciplined collaborative approach, with the cooperation of industry and governments, the Company believes that it has successfully developed unique, practical technology solutions for oil sands froth treatment tailings that offer significant improvements to technologies currently used, and address environmental, operational and economic challenges. There is real optimism that CVW CleanTech, other clean technology companies, along with industry partners and government can collaborate to meaningfully address climate change.

Financial Instruments and Financial Risk Factors

The Company has for accounting purposes, designated its cash and cash equivalents and accounts receivable as loans and receivables. Accounts payable and accrued liabilities, along with the deferred compensation liability, are classified for accounting purposes as other financial liabilities.

As of June 30, 2022 and December 31, 2021, the Company estimates that both the carrying and fair value amounts of the Company's financial instruments are approximately equivalent because of the short-term nature of the assets and liabilities.

a. Financial risk

The Company's activities expose it to a variety of financial, credit, liquidity and market risks, including interest rate and foreign exchange rate risks.

Financial risk management is carried out by the Company's management team with guidance from the Audit Committee and the Board of Directors. The Board of Directors also provides guidance for enterprise risk management.

b. Credit risk

Credit risk is the risk of loss associated with a counterparty's inability to fulfill its payment obligations. The Company's credit risk is primarily attributable to cash and cash equivalents and recovery of project costs and related holdbacks and receivables. Cash and cash equivalents are held with Canadian Chartered banks which are reviewed by management. Management believes that the credit risk concentration with respect to cash is minimal. The recovery of project costs is dependent on the Company meeting milestone obligations under the respective contribution agreements. Management believes that credit risk associated with contracted funding arrangements is low due to the credit quality of participants, rigorous reporting requirements to achieve milestones and a history of 100% collection of contributions in prior years.

c. Liquidity risk

Liquidity risk is the risk that the Company will not have sufficient cash resources to meet its financial obligations as they come due. The Company monitors its actual and projected cash flows to ensure there is sufficient liquidity available as obligations come due for payment. As at June 30, 2022, the Company had an aggregate cash balance of \$4.9 million available to settle current cash liabilities of \$376,000 (December 31, 2021 – cash \$408,000; current cash liabilities - \$347,000). Most of the Company's financial liabilities have contractual terms of 30 days or less. When CVW CleanTech has agreements in place to commercially deploy its technologies, additional sources of capital are expected to be required. Sources of capital to fund that stage of development are anticipated to come from a variety of sources, including, but not limited to, government grants, equity placements and debt financing.

d. Market risk

Market risk is the risk of loss that may arise from changes in market factors such as interest rates and foreign exchange rates.

i. Interest rate risk

The Company's current policy is to invest excess cash in interest bearing cash accounts, bankers' acceptances and guaranteed investment certificates issued by Canadian banks. The Company periodically monitors its investments and the creditworthiness of the banks it holds investments in.

ii. Foreign currency risk

The Company's reporting and functional currency is the Canadian dollar and most purchases are transacted in Canadian dollars. The Company does not hold any significant balances in foreign currencies to give rise to exposure to foreign exchange risk. Any impact from fluctuations in foreign exchange rates would be minimal and therefore the Company does not hedge its foreign exchange risk.

Capital management

The Company considers its shareholders' equity as its capital. At June 30, 2022, the Company had shareholders' equity of \$4.7 million (December 31, 2021 – shareholders' deficit of \$882,000). The Company does not have any bank debt or externally imposed capital requirements. The Company's capital management objectives are to manage its cash and cash equivalents prudently; to minimize expenditures on general and administrative costs to ensure funds are available to continue to advance the commercialization of CVW™ projects; and to access available government funding for research and development and commercialization.

Management reviews its capital management approach on an ongoing basis and believes that its current approach, given the relative size and stage of the Company, is appropriate.

Related Party Transactions

Key management personnel include those persons having authority and responsibility for planning, directing and controlling the activities of the Corporation as a whole. Compensation to directors and officers of the Company during the periods ended June 30, 2022 is summarized below.

Corporate officers				
	Q2 2022	Q2 2021	H1 2022	H1 2021
Compensation and benefits	209,000	380,000	642,000	721,000
Stock based compensation	153,000	20,000	173,000	56,000
	\$ 362,000	\$ 400,000	\$ 815,000	\$ 777,000

Board of Directors				
	Q2 2022	Q2 2021	H1 2022	H1 2021
Compensation and benefits	69,000	103,000	140,000	177,000
Stock based compensation	1,182,000	10,000	1,286,000	21,000
	\$ 1,251,000	\$ 113,000	\$ 1,426,000	\$ 198,000

Accounts payable and accrued liabilities at June 30, 2022 included \$ 81,000 due to directors and officers in respect of the transactions identified above. At December 31, 2021 - \$1,169,000 was payable to directors and officers, most of which was comprised of the deferred compensation liability, as described in the December 31, 2021 financial statements.

One member of the Board of Directors is a partner in a law firm which provides legal services to CVW CleanTech. Legal fees charged by this law firm for the six month period ended June 30, 2022 were \$240,000 (Q2 2022 - \$91,000). Of this amount, \$132,000 is captured on the balance sheet, within share issue costs, and the remainder is included within consulting and professional fees (Q2 - \$20,000 within share issue costs, remainder in consulting and professional fees). A balance of \$27,000 remained payable at June 30, 2022 relating to these transactions. There are no comparative amounts for 2021, as this individual was not a director of the Company until January 2022.

The Company has commitments to pay \$100,000 to each of two Corporate Officers on December 31, 2022 and December 31, 2023, to the extent they are still employed by the Company at those dates. No provision has been recorded in relation to these amounts at June 30, 2022.

The Company has a contractual obligation to a holding company controlled by the retired CEO, under the terms of a consulting agreement. Consulting fees of \$115,000 per annum are to be paid quarterly. The contract commenced April 1, 2022, with a term to February 2025. Consulting fees paid under this contract are not included in the compensation amounts noted above. However, compensation and benefits for the six months ended June 30, 2022 include a retirement allowance for the prior CEO of \$200,000, along with his salary and benefits to March 31, 2022.

Stock based compensation includes 100% of the expense for options granted in January 2022, as vesting conditions were achieved in June 2022. There are no further amounts to be expensed for these stock options in future periods as a result.

Off Balance Sheet Arrangements

The Company does not have any off-balance sheet arrangements.

Additional Disclosure for Venture Issuers Without Significant Revenue

During the periods ended June 30, 2022 and December 31, 2021, CVW CleanTech has not capitalized any research and development costs. All amounts that have been expensed as general and administrative expenses, along with research and development costs are disclosed in the Company's financial statements and in this MD&A. The Company has not established any deferred development costs and has not incurred any costs related to exploration activities.

Discussion of Risks

Current and prospective shareholders should specifically consider various risk factors, including, but not limited to, the risks outlined below. Should one or more of these risks or uncertainties, including the risks listed below, or a risk that is not currently known to us materialize, or should assumptions underlying those forward-looking statements prove incorrect, actual results may vary materially from those described herein.

We may not be able to successfully execute our business plan.

The execution of our business plan poses many challenges, including those as further described in this discussion of risks, and is based on a number of assumptions. We may not be able to successfully execute our business plan. In addition, we cannot guarantee that we will be able to leverage our relationships with oil sands producers or that commodity prices will support the capital expenditures required by oil sands producers for the implementation and development of our CVW™ process. We may not be able to proceed past the engineering phase with oil sands producers to develop a commercial project. If we experience significant cost overruns on our programs, or if our business plan is costlier than we anticipate, certain Project activities may be delayed or eliminated, resulting in changes or delays to our commercialization plans, or we may be compelled to secure additional funding (which may or may not be available) to execute our business plan. Additionally, we are expecting to complete certain Project activities, including optimization of the concentrator, tailings thickener, and minerals facilities which may take additional time and resources. We cannot predict with certainty our future revenues or results from our operations. If the assumptions on which our revenue or expenditure forecasts are based change, the benefits of our business plan may change as well.

Average price for West Texas Intermediate oil (“WTI”) was \$62 US per barrel in H12021, whereas the average price for H12022 was \$102. The invasion of the Ukraine by Russia in Q1 2022 has constrained oil supplies, created uncertainty in global markets and has increased market prices. The COVID-19 pandemic appears to be in a more controlled state in August 2022, however, there are new variants of concern which arise periodically and the impact of further outbreaks on human capital and supply chains can not be forecast with certainty. At present, supply chains are still somewhat disrupted, and inflation in June 2022 was the highest year over year change observed since 1983.ⁱⁱⁱ The federal government seeks to manage domestic inflation through monetary policy, primarily by increasing interest rates in the economy. The overnight rate was 0.25% from March 2020 through to March 2022, when a series of increases resulted in the rate reaching 2.5% in July 2022.

The extent and the impact of these events could adversely affect the progress and timing of the CVW™ Horizon Project. Concerns over COVID-19, commodity pricing, fluctuations in interest rates and foreign exchange rates, stock market volatility, geopolitical issues, OPEC+ actions, inflation, the availability and cost of credit, the volatility of major stock exchanges, the pace of economic growth in the People's Republic of China and trade disputes between the United States and the People's Republic of China have all contributed to increased economic uncertainty. The occurrence or threat of terrorist attacks in the United States or other countries could adversely affect the economies of Canada, the United States and other countries. Volatility in global and Canadian markets may continue to affect the petroleum industry, including oil sands producers, which in turn could affect the ability of the Company to continue with the next components of the Project activities. As a result, these activities may be delayed or eliminated, resulting in changes or delays to our commercialization plans and potentially higher costs.

We are dependent upon oil sands producers to adopt and integrate our CVW™ process in their oil sands operations.

Our success depends on the willingness and capacity of oil sands producers to adopt and integrate our CVW™ process into their own oil sands operations. For oil sands producers to adopt and implement our CVW™ process, we will have to negotiate commercial terms for the implementation of these technologies. This will require the interest and cooperation of the oil sands producers. The cost and complexity of integrating our CVW™ process is uncertain and will vary depending on the site and the objectives of each oil sands producer. We can offer no guarantee we will be able to conclude such commercial negotiations on reasonable terms or at all. Additionally, dramatic changes and volatile commodity prices and other geo-political events, such as the invasion of the Ukraine by Russia, may delay or cause revisions in oil sands producers' capital programs. This could result in delays or resistance to, adopting the Company's CVW™ technology.

Furthermore, any integration, design, construction, or operational problems encountered by oil sands producers associated with adopting and integrating our CVW™ process could adversely affect the market opportunity for our CVW™ process and our financial results.

The success CVW CleanTech has had to date on the Project does not provide any guarantee that Canadian Natural will proceed with a subsequent Engineering Procurement and Construction ("EPC") phase or the future commissioning of the Company's CVW™ technology.

When the Company moves into the EPC phase, additional capital will be required. These funds may come through the issuance of securities, debt, new or additional government grants, alternative financing sources, and/or some form of partnership or joint venture to fund these costs. There can be no guarantee that the Company will be able to raise additional capital or funding on acceptable terms or at all. Each of these processes may take longer and be costlier than expected, may not be on terms favourable to the Company or may not materialize into binding agreements for a commercially scaled version of our CVW™ process at all. As such, there is still uncertainty and risk that our CVW™ process will not be adopted on a commercial scale.

While the Company and Canadian Natural have consciously demonstrated a strong focus on Project activities and continue to actively work towards commercialization of the Project, investment decisions are expected to be undertaken on a year-by-year basis and a final investment decision with respect to commercialization of the Project is uncertain at this time. As a result, there is the potential for delay or revision to the Project activities, which will be affected by, amongst other factors, the current state of the global economy, global crude oil prices and current public health concerns, including those relating to COVID-19.

Crude oil and bitumen price fluctuations are beyond our control and may affect the ability and willingness of oil sands producers to evaluate our CVW™ process or enter into commercial projects with us.

Crude oil and bitumen price fluctuations are beyond our control and may have a material adverse effect on the willingness of oil sands producers to adopt and integrate our CVW™ process in existing or new oil sands projects and on the economics, operating results, financial condition and profitability of any commercial projects involving our CVW™ process.

The financial condition, operating results and future growth of oil sands producers are substantially dependent on prevailing and expected prices of oil and bitumen. Prices for oil are subject to large fluctuations in response to changes in supply and demand, geo-political uncertainty and a variety of additional factors, including access to markets and sufficient transportation capacity, all of which are beyond the control of oil sands producers.

Global crude oil prices may remain volatile for the near future because of market uncertainties over the supply and demand of these commodities due to the current state of the world economy, current public health concerns, including COVID-19, shale oil production in the United States, OPEC+ actions, political uncertainties, changes in global supply and demand due to the war between the Ukraine and Russia, sanctions imposed on certain oil producing nations by other countries, conflicts in the Middle East and ongoing credit and liquidity concerns, among other factors.

In February 2022, Russian military forces invaded Ukraine. In response, Ukrainian military personnel and civilians are actively resisting the invasion. The outcome of the conflict is uncertain and is having wide-ranging consequences on the peace and stability of the region and the world economy. Certain countries including Canada and the United States, have imposed strict financial and trade sanctions against Russia, which sanctions may have far reaching effects on the global economy. As part of the sanctions package, the German government paused the certification process for the 1,200 km Nord Stream 2 natural gas pipeline that was built to carry natural gas from Russia to Germany. In response, Russia has reduced natural gas shipments on the Nord Stream 1 pipeline to 20% of capacity. As Russia is a major exporter of oil and natural gas, these disruptions in oil and gas supply could cause a worldwide supply shortage of oil and natural gas, impacting worldwide prices. The long-term impacts of this conflict, the related sanctions and retaliatory measures taken by Russia, remain uncertain.

Inflation may disrupt the Company's ability to secure necessary services and equipment for the expected price, on the expected timeline, or at all.

The Company's operating costs could escalate and become uncompetitive due to supply chain disruptions, inflationary cost pressures, equipment limitations, escalating supply costs, commodity prices, and additional government intervention in financial markets. Escalations in pricing could impact future development decisions, and may have a material adverse effect on the Company's future financial performance and cash flows.

The cost or availability of specialized industrial equipment for oil sands operations may adversely affect the Company's ability to undertake development and construction projects. A failure to secure the services and equipment necessary to the Company's operations for the expected price, on the expected timeline, or at all, may have an adverse effect on the Company's financial performance and cash flows. There have been significant disruptions in worldwide supply chains which commenced during the COVID 19 pandemic and have been aggravated by the invasion of Ukraine.

In response to inflation in the Canadian economy, the Bank of Canada commenced a series of interest rate increases, raising the overnight rate to 2.5% in July 2022, from a low of 0.25% in March 2020. Higher borrowing costs could impact the available capital for our Project or possibly constrain credit available to our future commercial partners. These constraints could cause delays or cancellations in the Project.

Global or national health concerns, including the outbreak of pandemic or contagious diseases, such as COVID-19 and Monkeypox, may adversely affect the Company

In July 2022, the World Health Organization ("WHO") declared a public health emergency of international concern after cases of the Monkeypox virus were reported with increasing rate in countries with no previous history of transmission.^{iv}

The effects of COVID-19 upon the Canadian and worldwide economy appear to be diminishing. Rates of transmission and the severity of infection have been curtailed as a result of the efforts undertaken the past two years. There has been a return to the workplace for many, along with re-opening of borders for travel and trade. The future demand profile for petroleum products and / or mineral sands, remains uncertain as countries experience varying degrees of virus outbreak and newly emerging virus variants following efforts to re-open local economies and international borders.

Should the severity and number of Monkeypox infections or increases in COVID-19 infection rates occur, it could have a negative impact on the Company's ability to move forward with the Project and cause operational delays or increases in operating expenses. Increased operating expenses could arise due to disruptions in the supply chain, reduced access to necessary materials and services, increased employee absenteeism from illness, and temporary closures of the Company's or its future commercial partner's facilities.

The extent to which the Corporation's operational and financial results are affected by pandemic or contagious disease outbreaks will depend on various factors, such as the duration and scale of such outbreaks; additional actions taken by business and government in response, and the speed and effectiveness of responses to combat the virus. Additionally, the impact of large scale disease and virus outbreaks and the resulting effect on local and global economic conditions could also aggravate the other risk factors identified herein, the extent of which is not yet known.

Should an employee or visitor in any of the Company's facilities, offices or work sites become infected with a serious illness that has the potential to spread rapidly, this could place the Company's small workforce at risk. The Company takes every precaution to strictly follow industrial hygiene and occupational health guidelines. There can be no assurance that this virus or another infectious illness will not impact the Company's personnel and ultimately its operations.

We expect to continue incurring losses and consuming cash for several years and will likely need to raise additional capital, the availability of which cannot be assured.

We expect to incur continued losses until we can produce sufficient revenues to cover our costs. If we are unable to successfully implement our business plan, our cash requirements may increase, and we may find it difficult to raise additional funding and continue operations. We expect our cash reserves will be reduced due to future operating losses, and we cannot provide certainty as to how long our cash reserves will last or whether we will be able to access additional capital when necessary in order to carry on business.

CVW expects to rely on funding commitments from the Governments of Canada and Alberta to pay part of the project costs associated with the first implementation of CVW's Creating Value from Waste™ clean technology, the availability of which cannot be assured.

To secure ongoing and future government funding commitments, we will have to negotiate the terms and conditions under which such funding will be provided and enter into a definitive agreement with government agencies within prescribed time periods. Changes in governments and delays or other difficulties in satisfying pre-conditions for the signing of such definitive agreements create uncertainty in securing these and other government funding commitments. We can offer no guarantee that we will be able to conclude such negotiations and enter into such definitive agreements on reasonable terms or at all.

Even if definitive agreements are entered into, the terms and conditions of such agreements may not be favorable to the Company or may otherwise be subject to conditions which the Company cannot satisfy. For instance, the governments' obligations to fund payment of eligible costs will be subject to the satisfaction of several conditions, including the successful completion of other government funding programs, CVW CleanTech's compliance with the other terms and conditions of the government funding agreements and within the time periods required, and the Company securing, within certain prescribed time periods, the remaining funding necessary to complete the Project.

Given the need to first secure satisfactory commercial arrangements with an oil sands producer to adopt and integrate our CVW™ process, CVW CleanTech may not be able to comply with government-imposed deadlines to secure, within certain prescribed time periods, the funding necessary. As such, an extension of time to satisfy that condition may be required from the responsible government agencies in order to secure such funding commitments, the availability of which cannot be assured.

If government funding is not available, the Company may be required to raise additional capital through the issuance of equity securities, through debt financing, through alternative financing arrangements or with some form of partnership or joint venture. No assurances can be given that the Company will be able to raise additional capital or funding on acceptable terms or at all.

We could lose or fail to attract the personnel necessary to run our business.

Our success depends in large part on our ability to attract and retain key management, engineering, scientific and operating personnel. As we develop additional capabilities and expand the scope of our operations, we will require additional skilled personnel. Recruiting personnel for the oil sands and waste remediation industry is often highly competitive. Larger entities that have significant capital resources may attract personnel more easily than our Company. We may not be able to continue to attract and retain qualified executive, managerial, technical and operational personnel needed for our business. Our failure to attract or retain qualified personnel could have a material adverse effect on our business.

The breadth and complexity of changes to Canadian federal and provincial environmental laws, fiscal policies and regulatory frameworks make it difficult for oil sands producers to predict the potential financial impacts of these changes on oil sands producers and their operations which may affect the timing and willingness of oil sands producers to evaluate our CVW™ process or enter into commercial projects with us.

A number of statutes, regulations and frameworks are under development or have been issued by various Canadian federal and provincial regulators that affect oil sands developments, including changes relating to carbon pricing, carbon emissions rates, tax credits for carbon capture and storage, tailings management, water use, air emissions and land use. The breadth and complexity of these changes and uncertainty arising from proposed changes, make it difficult to predict how oil sands producers will be affected. Because it is not currently possible to predict the nature of any future requirements or the impact on oil sands producers and their business, financial condition, results of operations and cash flow, oil sands producers may be unwilling to evaluate our CVW™ process or proceed past the engineering design phase and enter into commercial projects with us until these uncertainties and risks are better understood.

Our potential customer base is concentrated, and we are subject to risks from those customers' internal research and development of competing tailings management strategies.

Based on the current stage of our CVW™ process, our potential customer base is limited to the mining sector of Canada's oil sands industry now consisting of Canadian Natural (Horizon and Albian Sands sites), Suncor Energy Inc. (Base Plant and Fort Hills sites), Syncrude Canada and Imperial Oil Limited (Kearl), each of whom may prefer other methods of dealing with froth treatment tailings that do not include our CVW™ process.

As our CVW™ process has the potential to replace existing methods of dealing with froth treatment tailings, competition for our process will come from current oil sands producers, from improvements to current methods of dealing with froth treatment tailings and from new alternative methods of dealing with froth treatment tailings.

Additionally, oil sands producers are working on developing alternative methods of dealing with froth treatment tailings, such as thickening and dewatering methods, which could meet current regulatory requirements. The industry may elect to use such methods or develop others as alternatives to adopting the Company's technology.

While the Company has completed the FEED and subsequent optimization and validation engineering for the implementation of the Company's CVW™ technology at Canadian Natural's Horizon oil sands site, Canadian Natural is not required to proceed past this phase nor has it agreed to adopt the Company's CVW™ technology on a commercial scale.

Other companies, research facilities and universities are actively engaged in the research and development of processes for dealing with froth treatment tailings. Each of these organizations has the potential to develop competing processes that would diminish the competitiveness of our CVW™ process. These organizations, including the oil sands producers themselves, have substantial financial resources, research and development capabilities, and other resources, which give them significant competitive advantages over us.

The CVW™ process has not been commercially demonstrated and process recoveries on a commercial level are uncertain.

To date, we have focused primarily on R&D, engineering design and optimization and validation. The CVW™ process is a new process and consequently we have no experience operating on a large-scale commercial basis. As such, the recovery of bitumen, critical minerals, solvents and water in commercial projects and the environmental impacts of using the CVW™ process involves uncertainty. There can be no assurance that the Company's CVW™ process will recover bitumen, critical minerals, solvents and water at the expected levels, with the expected environmental benefits, within the forecasted capital and operating costs, or on the expected schedule.

We are dependent on the composition of froth treatment tailings for quantity and quality of bitumen, solvents and minerals.

There is inherent variability and uncertainty regarding the composition of the feed tailings that may be processed by the CVW™ process from different oil sands sites in commercial projects and over time from the same site, which could impact realized recovery rates, product volumes, revenues and unit operating costs significantly.

More specifically, there is uncertainty relating to the volumes of bitumen, heavy minerals, solvent and water that may be recovered from froth treatment tailings using the CVW™ process due to uncertainties in froth tailings composition and process recovery rates. While there have been many Athabasca basin studies that have assessed the composition of oil sands ores, as well as extensive sampling conducted by the Company and some of its potential oil sands commercialization partners on live froth treatment tailings at various oil sands sites, there remains uncertainty about the levels of bitumen, solvent and heavy minerals, and the composition of such heavy minerals, in any froth treatment tailings streams that may be used in a commercial project. These could vary substantially and adversely from the levels and composition expected by the Company. As such, actual production, and the net revenues and cash flows to be derived therefrom, may vary from time to time, and over the life of a commercial project from expected levels, and such variations may be material.

We have no experience operating our CVW™ process on a commercial basis and there are uncertainties involved with commercial project execution.

The execution of commercial projects once negotiated involves risks associated with the planning, engineering, cost, construction, integration, commissioning, and start-up of new CVW™ facilities with existing or new oil sands operations. Risks include failures in the specification, design or technology selection; determining and agreeing upon a scope for the Project; building the Project in the approved time and at the agreed cost; and meeting agreed performance targets, including capital and operating costs, efficiency, recoveries and maintenance costs. Actual results in the execution of any commercial projects could materially and adversely vary from expected outcomes. Many factors can affect key outcomes, including general economic, business and market conditions, the availability and cost of qualified personnel, key materials and equipment, the complexity of managing multiple suppliers and contractors, the complexity of building within existing operating sites, weather conditions, changing government regulations, approval requirements, permits and public expectations.

Capital cost overruns or delays in achieving commercial implementation could have a material adverse effect on the Company's business, financial condition, results of operations and cash flow. Moreover, commercial implementation may require substantial capital and we do not know whether we will be able to secure sufficient funding on terms acceptable to us or at all. Our failure to complete commercial implementation or financing could have a material adverse effect on our business and financial results.

We are dependent on oil sands operators for froth treatment tailings volumes.

There are numerous uncertainties involved with estimating the quantities of froth treatment tailings that may be available for processing in future commercial projects using the CVW™ process. The quantity of froth treatment tailings available will depend on a number of factors, including the overall volumes of oil sands ore mined and processed by oil sands operators, their extraction and froth treatment efficiency, and the amount and timing of any operational downtime due to planned or unplanned slowdowns, shutdowns or other restrictions on production.

The availability of froth treatment tailings for processing will depend on oil sands operators' froth tailings volumes, over which the Company has no control.

Forecasting our financial and business results due to fluctuations in commodity prices creates complexities and may restrict our access to funding for our commercialization plan.

Due to the stage of development of our business, it is difficult to predict with certainty future revenues or results of operations. We are also subject to normal market and financial risks such as credit risks, foreign currency risks and fluctuations in commodity prices. As a result, it is possible that in one or more future quarters, our operating results may fall below the expectations of investors and securities analysts. Not meeting investor expectations may materially and adversely impact the trading price of our common shares and restrict our ability to secure required funding to pursue our commercialization plans.

The royalty regime in Alberta and other fiscal incentives may not encourage oil sands operators to enter into commercialization agreements and could significantly reduce the value of the Company's CVW™ process and technologies.

The prospects for commercializing the CVW™ process, and the Company's operating cash flow from commercial projects, will be affected by the applicable royalty regime, any future changes to the royalty regime by the Government of Alberta and any Alberta or Federal fiscal incentives. The Province of Alberta receives royalties linked to price and production levels on the production of natural resources from lands in which it owns the mineral rights, including lands with new and existing oil sands projects. The Government of Alberta may not implement a fiscal regime for minerals and bitumen from oil sands tailings that incentivizes oil sands operators to enter commercialization agreements. Further, the Government of Alberta may implement a regime that adversely affects the results of operations, financial condition or prospects of the Company or its oil sands partners. In addition, the Company may not be successful in obtaining Alberta or Federal fiscal incentives as part of the commercialization process.

Exchange rate fluctuations are beyond our control and may have a material adverse effect on our business, operating results, financial condition and profitability.

Our revenues will be affected by fluctuations in the exchange rate between the Canadian dollar and the United States dollar. Once a commercial deal is arranged, we expect to generate a significant portion of our revenues in United States dollars while a significant portion of our operating expenses and capital expenditures are in Canadian dollars. As a result, any decrease in the value of the United States dollar relative to the Canadian dollar reduces the amount of Canadian dollar revenues we realize on sales, without a corresponding decrease in expenses. Exchange rate fluctuations are beyond our control, and the United States dollar may depreciate against the Canadian dollar in the future, which would result in lower revenues and margins. In order to reduce the potential negative effect of a weakening United States dollar, we may enter into various hedging programs. However, if the Canadian dollar increases in value, it will negatively affect our financial results.

We depend on our intellectual property and our failure to protect that intellectual property could adversely affect our future growth and success.

Our success depends in part on our ability to protect our intellectual property rights. We rely on patent, trade secret, trademark and copyright laws to protect our intellectual property. However, our patent position remains subject to complex factual and legal issues, which may give rise to uncertainty as to the validity, scope and enforceability of a particular patent. Accordingly, there is no assurance that effective patent, trade secret, trademark and copyright protection will always be available for our intellectual property rights, both in Canada and other countries.

We also seek to protect our proprietary intellectual property, including intellectual property that may not be patented or patentable, in part by confidentiality agreements and, if applicable, inventors' rights agreements with our strategic partners and employees.

We can provide no assurance that these agreements will not be breached, that we will have adequate remedies for any breach, or that such persons or institutions will not assert rights to intellectual property arising out of these relationships.

There are cyber-security threats that may jeopardize our reliance on information technology.

Our operations are dependent on the functioning of several information technology systems. Exposure of our information technology systems to external threats poses a risk to the security of these systems. Such cyber-security threats include unauthorized access to information technology systems due to hacking, viruses and other causes that can result in service disruptions, system failures and the disclosure, deliberate or inadvertent, of confidential business information. Significant interruption or failure of any or all of these systems could result in operational outages, delays, lost profits, lost data, increased costs, and other adverse outcomes.

These factors could include a loss of communication links or reliable information, security breaches by computer hackers and cyber terrorists, and the inability to automatically process commercial transactions or engage in similar automated or computerized business activities.

We may be involved in intellectual property legal proceedings that cause us to incur significant expenses or prevents us from selling the CVW™ process.

We may become subject to legal proceedings in which it is alleged that we have infringed the intellectual property rights of others or commence legal proceedings against others who we believe are infringing upon our rights. Our involvement in intellectual property litigation could result in significant expense to us, adversely affecting the development of sales of the challenged process or intellectual property and diverting the efforts of our technical and management personnel, whether or not such litigation is resolved in our favour. In the event of an adverse outcome as a defendant in any such litigation, we may, among other things, be required to: (a) pay substantial damages; (b) cease the development, use, sale or importation of processes that infringe upon other patented intellectual property; (c) expend significant resources to develop or acquire non-infringing intellectual property; (d) discontinue processes incorporating infringing technology; or (e) obtain licenses to the infringing intellectual property. We may not be successful in such development or acquisition or such licenses may not be available on reasonable terms. Any such development, acquisition or license could require the expenditure of substantial time and other resources and could have a material adverse effect on our business and financial results.

There are operational hazards involved in the CVW™ process.

CVW™ projects will involve the typical risks associated with recovering, transporting and processing hydrocarbons, including fires, explosions, gaseous leaks, migration of harmful substances and spills. A casualty occurrence might result in the loss of life and equipment, as well as injury, property damage or the interruption of the operations of a commercial project.

The Company may not carry adequate insurance with respect to all potential casualties, damages, losses and disruptions. Losses and liabilities arising from uninsured or under-insured events could have a material adverse effect on the Company's results of operations, financial condition and prospects.

We may consider new business opportunities.

We may consider expanding our business beyond what is currently contemplated in our business plan. Depending on the financing requirements of a potential acquisition or new process opportunity, we may be required to raise additional capital through the issuance of equity or debt. If we are unable to raise additional capital on acceptable terms, we may be unable to pursue a potential acquisition or new process opportunity.

Critical Accounting Estimates and Judgements

The preparation of financial statements in accordance with IFRS requires management to make critical accounting estimates and judgements that affect the amounts reported in the financial statements and accompanying notes. These estimates and judgements are re-evaluated regularly, based upon historical experience and other factors, including expectations of future events, as believed to be reasonable under the circumstances. The resulting accounting estimates will, by definition, seldom equal the actual results. Management considers the following areas to be those where critical accounting policies affect the significant estimates and judgements used in the preparation of the Company's financial statements.

Government assistance

Agreements for government assistance contain many conditions prior to cash amounts being advanced. Some agreements provide a proportion of expenditures to be reimbursed, while others provide funding in advance of expenditures. Estimates about the timing of these expenditures and the dollar value involved are required. In addition, most government assistance contracts allow the funding agency to withhold a portion of funds until certain events occur. Determining the timing of these events, to reach reasonable assurance about the timing and amount to be collected from the funding agency, requires significant judgement.

Equity based compensation

The compensation cost for stock options, RSU's, DSU's and the amount attributed to warrants when share units are issued is based upon the estimated fair value of those instruments at the time of the grant using the Black-Scholes option pricing model and through the use of Monte Carlo scenarios. Measurement inputs to the Black-Scholes model include the share price on measurement date, assumptions about the probability of meeting vesting conditions, exercise price, expected volatility, expected life, expected dividends and the risk-free interest rate. Significant estimates and assumptions are used in determining the expected volatility, the weighted average expected life and, the probability of achieving vesting conditions and expected forfeitures. Changes to the input assumptions could have a significant impact on the amounts recognized for equity-based compensation.

Internally generated intangible assets and research and development expenditures

Research activities, such as pilot projects, and related development costs which are undertaken to commercialize CVW™ technologies, are expensed as incurred. Significant judgement is required to determine when costs meet the criteria for recognition as an intangible asset. To date, no project costs have been capitalized nor met the criteria to be classified as internally generated intangible assets.

Outstanding Share Data

Outstanding Share Data - as of August 25, 2022	
Common shares issued and outstanding:	116,875,294
Common share awards granted and outstanding:	
<i>Options</i>	5,935,000
<i>RSU's</i>	1,597,853
<i>DSU's</i>	1,486,614
Total outstanding common share awards:	9,019,467
Number of warrants outstanding:	12,875,000

Compliance

Mr. Daniel Erasmus, a registered professional engineer in the Province of Alberta and a member of CIM, is acting as the Qualified Person for the Company on the CVW Horizon project, for the purposes of this MD&A.

Forward looking information or statements and cautionary factors that may affect future results

Certain statements contained in the following MD&A constitute forward-looking statements (within the meaning of the Canadian securities legislation and the U.S. Private Securities Litigation Reform Act of 1995) that involve risks and uncertainties. Forward-looking statements are frequently, but not always, identified by words such as “expects”, “anticipates”, “believes”, “intends”, “estimates”, “potential”, “possible” and similar expressions, or statements that events, conditions or results “will”, “may”, “could” or “should” occur or be achieved. The forward-looking statements may include statements regarding work programs, capital expenditures, timelines, strategic plans, market price of commodities or other statements that are not statement of fact. Forward-looking statements are statements about the future and are inherently uncertain, and actual achievements of the Company may differ materially from those reflected in forward-looking statements due to a variety of risks, uncertainties and other factors. For the reasons set forth above, investors should not place undue reliance on forward-looking statements. Important factors that could cause actual results to differ materially from the Company’s expectations include uncertainties involved in disputes and litigation, fluctuations in interest rates, commodity prices and currency exchange rates; changes in the availability, and cost, of technical labour required for our Project; price escalation and/or inflationary pressures affecting the cost of equipment and material required to commercialize the Project; the uncertainty of estimates of capital and operating costs; the need to obtain additional financing and uncertainty as to the availability and terms of future financing; the duration and full impact of COVID-19 and the hostilities in Ukraine; the impact on the Company of increasing inflation; and other risks and uncertainties disclosed in other information released by the Company from time to time and filed with the appropriate regulatory agencies.

All forward looking statements are based on the Company’s beliefs and assumptions which are based on information available at the time these assumptions are made. The forward-looking statements contained herein are as of August 25, 2022 and are subject to change after this date, and the Company assumes no obligation to publicly update or revise the statements to reflect new events or circumstances, except as may be required pursuant to applicable laws.

Although management believes that the expectations represented by such forward-looking information or statements are reasonable, there is significant risk that the forward-looking information or statements may not be achieved, and the underlying assumptions thereto will not prove to be accurate.

Actual results or events could differ materially from the plans, intentions and expectations expressed or implied in any forward-looking information or statements, including the underlying assumptions thereto, as a result of numerous risks, uncertainties and factors including: the possibility that opportunities will arise that require more cash than the Company has or can reasonably obtain; dependence on key personnel; dependence on corporate collaborations; potential delays; uncertainties related to early stage of technology and product development; uncertainties as to fluctuation of the stock market; uncertainties as to future expense levels and the possibility of unanticipated costs or expenses or cost overruns; and other risks and uncertainties which may not be described herein. The Company has no policy for updating forward looking information beyond the procedures required under applicable securities laws.

References

ⁱ <https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/oil-gas-emissions-cap/options-discussion-paper.html>

ⁱⁱ <https://budget.gc.ca/2022/report-rapport/chap3-en.html>

ⁱⁱⁱ <https://www150.statcan.gc.ca/n1/daily-quotidien/220720/dq220720a-eng.htm>

^{iv} https://worldhealthorg.shinyapps.io/mpx_global/